



World Health
Organization
REGIONAL OFFICE FOR Europe



Policy brief

Water, sanitation, hygiene and health

Water and sanitation are central to human life, health, well-being, dignity and sustainable development

Why water, sanitation and hygiene matter

Hand hygiene is the most effective no-regret action to prevent the transmission of infectious diseases



Universal and equitable access to safe drinking-water and adequate sanitation are basic human rights



Improving water, sanitation and hygiene (WASH) in health-care facilities is a core component for ensuring quality of care and achieving universal health coverage



Improving WASH in schools contributes to health, well-being and better learning opportunities for children



What are the gaps in the WHO European Region?

More than 31 million people lack access to basic sanitation



About 16 million people still lack access to basic drinking-water services



No regional estimate is available on basic hand hygiene for communities



Access to safely managed sanitation ranges from 16% to 99% across Member States



Over 6 million pupils did not enjoy basic drinking-water and over 7.4 million pupils lacked basic sanitation facilities at school in 2019



One in four health-care facilities around the world lacked basic water services in 2016



Rural dwellers and the poorest are the most disadvantaged



7 people die every day from diarrhoea linked to unsafe water and sanitation



Sufficient financial resources to achieve national WASH targets were reported by 4 of 14 Member States only

What needs to be done?

- ✓ Provide access to safe water and sanitation for everyone
- ✓ Ensure hand hygiene for all in all settings
- ✓ Set and implement country-tailored WASH targets and action plans by using the Protocol on Water and Health
- ✓ Plan and allocate adequate budgets for WASH
- ✓ Strengthen national monitoring and surveillance
- ✓ Improve health sector leadership and engagement with other sectors, subnational levels and stakeholders



Water, sanitation, hygiene and health

Water and sanitation are central to human life, health, well-being, dignity and sustainable development. Universal and equitable access to sufficient amounts of safe drinking-water and adequate sanitation are basic human rights (1). A progressive approach is required towards ensuring safety, equity, accessibility, availability and affordability of water and sanitation services for all, and in all settings where people live, study, play, work, rest and seek care (1,2). The 2030 Agenda for Sustainable Development (2030 Agenda) recognizes the central role of WASH in its Sustainable Development Goals (SDGs) (3). SDG 6 (ensure availability and sustainable management of water and sanitation for all) comprises six technical targets, which include:

target 6.1: achieve universal and equitable access to safe and affordable drinking-water for all;

target 6.2: achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations; and

target 6.3: improve water quality by reducing pollution, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse of water.

The importance of WASH is further echoed in parts of SDG 3 (ensure healthy lives and promote well-being for all at all ages):

target 3.3: combat water-borne and other communicable diseases; and

target 3.9: substantially reduce the number of deaths and illnesses from water and soil pollution and contamination.

Despite significant progress, access to basic WASH services is not a reality for everyone in the WHO European Region, and people still face unmet basic needs. Infectious water-related diseases (e.g. diarrhoeal and respiratory infections) caused by unsafe drinking-water, poorly managed sanitation and inadequate hygiene practices represent a considerable health burden in the Region (4,5).



- ☰ Naturally occurring water constituents, such as arsenic and fluoride, and anthropogenic substances, such as lead from plumbing, nitrates and other chemicals from agricultural and commercial activity, are a public health concern in various locations throughout the Region. Driving forces, such as population growth, urbanization and climate change, are expected to exacerbate the impacts associated with changes in availability and quality of freshwater resources and challenge access to WASH services. The links between climate, agriculture, energy, safe WASH and health need to be addressed in an integrated, multisectoral fashion (6,7).
- ☰ All water-related disease is preventable by providing and sustaining safe WASH services. Efforts are required in the Region to close the persisting gaps in basic WASH services in accordance with SDG 1.4, while accelerating efforts towards provision of safely managed water and sanitation services across the Region to protect human health and the environment.
- ☰ Ensuring universal and equitable access to WASH services requires considering provision in places such as schools, health-care facilities, prisons and workplaces; it also means addressing the special needs of vulnerable groups. Improving WASH in health-care facilities is a core component for ensuring quality of care, achieving universal health coverage and protecting the health of patients, staff and the community.
- ☰ Intersectoral and multistakeholder action is vital for prevention and control of water-related diseases and tackling emerging challenges, such as climate change and antimicrobial resistance. While the health sector clearly has a vital role in advancing and sustaining safe WASH services that protect health, it also needs to engage other sectors through leadership, partnership and advocacy and to promote a Health in All Policies approach to achieve improved health outcomes.
- ☰ Emerging health risks and concerns require attention by policy-makers, scientists and practitioners; examples include the important role that WASH and wastewater factors have in the environmental dispersal and transmission of antimicrobial resistance (8); the occurrence of *Legionella* infections; and the hazard posed for freshwater resources by microplastics and persistent anthropogenic chemicals (9).
- ☰ Government leadership and accountability are important for progressively attaining sustainable and safe WASH services for all in all settings. The Protocol on Water and Health (10) is a powerful legal instrument in the WHO European Region that promotes the setting and implementation of national WASH policies and targets.
- ☰ To monitor progress, the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) monitors national, regional and global progress towards SDG 6.1 and SDG 6.2 (Box 1) (13).



Box 1. Monitoring progress of SDG targets on WASH

SDG 6 sets a clear agenda towards achieving the shared vision of safe WASH for all. The JMP monitors national, regional and global progress towards SDG 6.1 and SDG 6.2 (13) using WASH service ladders to benchmark and compare progress across countries. The ladders build on established facility type classifications but also introduced additional criteria for basic and safely managed services that are derived from the human right to water and sanitation and correspond with the SDG targets (Fig. 1). These can be utilized for assessment in different settings and countries. The ladder approach allows Member States to set specific targets considering their needs and capacities and to make incremental progress towards realization of their targets.

The UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) monitors implementation and progress on SDG 6, particularly SDG 6.a and SDG 6.b (on the means of implementation) (11). GLAAS provides evidence for decision-makers to improve WASH through monitoring the WASH-enabling environment, including policy frameworks, institutional arrangements, human resources, and international and national finance streams (12).

Fig. 1. WASH service ladders

Drinking water ladder		Sanitation ladder		Handwashing ladder	
SERVICE LEVEL	DESCRIPTION	SERVICE LEVEL	DESCRIPTION	SERVICE LEVEL	DESCRIPTION
SAFELY MANAGED	Drinking water from an improved water source which is located on premises, available when needed and free from faecal and priority contamination	SAFELY MANAGED	Use of an improved sanitation facility which is not shared with other households and where excreta are safely disposed in situ or transported and treated off-site	BASIC	Hand washing facility with soap and water in the household
BASIC	Drinking water from an improved source where collection time exceeds 30 minutes for a roundtrip, including queuing	BASIC	Use of improved facilities which are not shared with other households	LIMITED	Handwashing facility without soap or water
LIMITED	Drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing	LIMITED	Use of improved facilities shared between two or more households	NO FACILITY	No handwashing facility
UNIMPROVED	Drinking water from an unprotected dug well or unprotected spring	UNIMPROVED	Use of pit latrines without a slab or platform, hanging latrines and bucket latrines		
SURFACE WATER	Drinking water directly from a river, dam, lake, pond, stream, canal or irrigation channel	OPEN DEFECATION	Disposal of human faeces in fields, forest, bushes, open bodies of water, beaches or other open spaces or with solid waste		

Note: Handwashing facilities may be fixed or mobile and include a sink with tap water, buckets with taps, tippy-taps, and jugs or basins designated for handwashing. Soap includes bar soap, liquid soap, powder detergent, and soapy water but does not include ash, soil, sand or other handwashing agents.

Note: Improved sources include: piped water, boreholes or tubewells, protected dug wells, protected springs and packaged or delivered water.

Note: Improved facilities include: flush/pour flush to piped sewer system, septic tank or pit latrine; ventilated improved pit latrine, composting toilet or pit latrine with slab.

Source: based on WHO, UNICEF, 2016 (13).

Facts and figures

Access to WASH services

- ☰ In 2017 over 900 million people were living in the WHO European Region and 92% used safely managed drinking-water services, which are improved water sources located on premises, available when needed and free from contamination. About 16 million people, however, still lacked access to basic drinking-water services. These people must rely on water that is prone to microbial contamination, in particular the 3 million who rely on surface water for direct consumption (11).
- ☰ Around 68% of the population in the Region used safely managed sanitation services and 73% used sanitation facilities connected to sewers. Although the Region is one of the most developed WHO regions in terms of sanitation coverage, more than 31 million people lacked access to basic sanitation. The 314 000 people who still practised open defecation in 2017 are denied the opportunity to live in a healthy environment and are deprived of the human right to adequate sanitation (11).
- ☰ In upper-middle-income and lower-middle-income countries, only 38% and 28%, respectively, of wastewater is treated and a substantial part is released to the environment without treatment (14).
- ☰ Globally, many people lack basic hand hygiene services; four in 10 households do not have soap and water on the premises. Data are available for only six of the 53 Member States of the WHO European Region and so no regional estimation is available. The limited data indicate disparities between urban and rural areas and between the poorest and richest in the availability of handwashing facilities with soap and water on the premises (15). This indicates a need to improve national monitoring and intensify action towards achieving universal hand hygiene.
- ☰ Progress in providing access to water and sanitation is uneven, primarily focused on urban areas. Rural dwellers and the poorest are the most disadvantaged. Differences in access to basic drinking-water and sanitation services between urban and rural populations can be up to four-fold in some Member States in the Region (11,16).
- ☰ National WASH plans are rarely supported by the necessary financial and human resources, which hinders implementation and intended outcomes. Data available from 14 countries of the Region indicate that less than one third has sufficient financial resources to achieve their national WASH targets. These estimates indicate a tremendous gap in financing to achieve national and global WASH targets (12).

WASH in schools and health-care facilities

- ☰ In the WHO European Region, more than 90% of schools provided basic drinking-water, sanitation and hygiene services in 2019. These averages, however, mask differences between and within Member States. In some Member States, access to basic drinking-water services is as low as 51%, to basic sanitation services 34% and to basic hygiene services 12% (17).
- ☰ At least 6 million pupils in the Region do not enjoy basic drinking-water services at school and over 7.4 million pupils attend schools that lack basic sanitation facilities, such as toilets or latrines (17). About one in 10 schools do not have handwashing facilities with soap and water available to pupils (15).
- ☰ Globally, one in four health-care facilities lacked basic water services in 2016, and one in eight had no sanitation service. Many lacked basic facilities for hand hygiene and safe segregation and disposal of health-care waste (18).
- ☰ There is a major data gap on WASH in health-care facilities in the WHO European Region, indicating a need for intensified action to implement World Health Assembly resolution 72.7 on WASH in health-care facilities, which calls for strengthening national monitoring and improvement actions (19).

Water-related diseases

WASH-related diarrhoea was estimated to be responsible for around 2700 deaths in 2016 in the WHO European Region; this was more than seven people dying every day. The attributable fraction for unsafe WASH varies across the Region ranging from 8% in high-income Member States to 45% in those of lower and middle income in eastern and central Europe, the Caucasus and central Asia (5,20).

The highest numbers of reported outbreaks in the Region in 2016 were of viral gastroenteritis, hepatitis A, *Escherichia coli* diarrhoea and legionellosis. Published data indicate that nearly 20% of all investigated outbreaks of infectious diseases in the Region were attributable to lack of WASH services. The true extent of water-related diseases, however, is unknown and available data are likely to represent only a small fraction of the complete picture (4).



Priorities for action: what now?

The 2030 Agenda outlines a series of ambitious goals (3). Member States of the WHO European Region committed to the 2030 Agenda and produced a roadmap for its

implementation (21). The Roadmap proposes priorities for action grouped around five strategic objectives (Fig. 2).

Fig. 2. The strategic directions and enablers of the WHO SDG roadmap



Source: WHO Regional Office for Europe; 2017 (21).



Government policies set the direction of actions. If the political will is there, countries can effectively address WASH-related health challenges through national development strategies or action plans across the sectors and can monitor progress.

In ensuring safe and equitable WASH services, the health sector should accelerate efforts to engage other sectors of government through leadership, partnership, advocacy and mediation to achieve improved health outcomes and to implement a Health in All Policies approach (7). The health sector should

- ☰ provide health-based WASH policies and targets;
- ☰ establish regulatory frameworks ensuring the safe management of WASH services;
- ☰ coordinate their implementation in cooperation with key sectors; and
- ☰ monitor progress.

The Protocol on Water and Health, jointly serviced by the United Nations Economic Commission for Europe and the WHO Regional Office for Europe, is a legally binding instrument aimed at achieving an adequate supply of safe

drinking-water and sanitation for everyone and effectively protecting water resources in the WHO European Region. Its objective is to protect human health and well-being through sustainable water management and the prevention, control and reduction of water-related disease (10).

The Protocol provides an important regional platform to promote and operationalize the implementation of regional and global commitments related to WASH and health in an integrated manner, in particular those expressed by the SDGs and the Ostrava Declaration on Environment and Health (22). Its focus on integrated and intersectoral approaches and coherent policies, in particular with regard to setting and implementing targets, is fully consistent with the 2030 Agenda and clearly promotes whole-of-government and whole-of-society approaches. The Protocol's legally binding nature is also an important asset for channelling and sustaining the long-term efforts needed to achieve the 2030 Agenda. With many synergies and common characteristics, it is effective to implement the Protocol and the WASH-related targets of the 2030 Agenda in an integrated way to support their effective implementation at the country level and to avoid duplication of efforts (Box 2) (23). Case study 1 illustrates efforts in Montenegro for implementation of the Protocol and provision of safe and equitable WASH services.

Box 2. Setting targets under the Protocol on Water and Health for achieving the SDGs

The Protocol requires countries to pursue the aim of access to drinking-water and sanitation for everyone within a framework of integrated water management systems. For these purposes, it requires countries to establish tangible targets, to implement measures to ensure targets are met and to regularly review and report on the progress achieved.

Targets set under the Protocol are meant to be time bound and tailor-made to reflect a country's socioeconomic and environmental health conditions, as well as its priorities and improvement needs in the WASH domain. The established targets should be accompanied by a realistic action plan, outlining prioritized and time-bound measures towards achieving the set targets. This approach lies at the core of the Protocol's planning, performance and accountability framework.

Countries would each collect and evaluate data on their progress towards the achievement of the targets and on indicators designed to show how that progress has contributed towards preventing, controlling or reducing water-related disease (23).

Case study 1. Ratification of the Protocol on Water and Health in Montenegro and addressing inequalities in access to water and sanitation services

Significant inequities exist in access safely managed drinking-water and adequate sanitation between people living in rural areas and those living in urban settlements in Montenegro, as well as problems with securing proper WASH conditions in schools and health-care facilities.

The Ministry of Health has led the Protocol on Water and Health accession process. A roadmap was developed through an inclusive consultative process involving representatives from the different ministries, the Parliament and civil society. It resulted in the establishment of a strong coordination platform to provide coherence among all stakeholders and to guide actions to achieve safe WASH services for all in all settings.

A major accomplishment was achieved when the law on ratification of the Protocol was approved by the Government of Montenegro at the end of 2019. The adoption of the Protocol provides the Government with a powerful instrument to eliminate existing deficiencies and inequities between urban and rural settings so that all people across the country may have access to safe and sustainable drinking-water and sanitation services, contributing the health and well-being of all where no one is left behind (24).



Preventing disease and addressing health determinants



The determinants of health are not to be found simply in health-care facilities but also in the home, workplace, school, street and environment, and in how society treats its citizens. Whether people are healthy or not is determined by their circumstances and environment. Consequently, approaches that focus on treatment of individual diseases are insufficient to tackle modern environmental health challenges, including those related to WASH. Addressing the upstream determinants of health is an effective approach to prevent and reduce their adverse impacts on health. Such approaches are often defined by policies in key sectors other than health (e.g. housing, industry) and the health sector needs to engage proactively with other sectors to raise awareness of the health impacts of their actions and to protect public health (7).

Unsafe water, inadequate sanitation and poor hygiene practices can have profound adverse effects on human health, including infectious and noncommunicable diseases. The provision of safe WASH services in accordance with health-based WHO guidelines (25–27)

and the prevention, reduction and control of the WASH-related disease burden require effective health systems to provide surveillance, early-warning and response capacities in relation to water-related disease. Alongside this, strong multisectoral coordination and collaboration between different stakeholders are needed to:

- prevent and manage upstream risks to health (e.g. agriculture, climate, environment, water management); and
- promote the uptake of safe WASH services and practices and secure their sustainability (e.g. education, finance, labour, urban and rural development).

Close cooperation with cities, municipalities, regions, WASH service providers, professional associations and civil society organizations is instrumental to trigger improvement and provide safe and sustainable WASH services at local level (Case study 2).

Case study 2. Strengthening national policies and strategies towards fulfilling SDG commitments in Tajikistan

In many parts of the WHO European Region, people living in rural areas face challenges in accessing safe drinking-water. In Tajikistan, for example, over 30% of the rural population does not have access to basic drinking-water services. In some areas, water is consumed from unsafe sources, such as unprotected springs and wells, which may not meet sanitary requirements and poses the risk of disease.

A large-scale intervention project on water safety planning and water quality surveillance to address these challenges was implemented in Tajikistan, supported by the WHO Regional Office for Europe and funded by Finland (28). It has led to major policy achievements, including integration of WHO-recommended water and sanitation safety planning approaches in the new law on drinking-water and sanitation and setting dedicated targets on introducing water safety plans for large- and small-scale systems.

At the fifth session of the Meeting of the Parties of the Protocol on Water and Health in November 2019, Mr Kamolzoda, Deputy Minister of Health and Social Protection of the Republic of Tajikistan, shared his country's achievements in water safety planning implementation and noted: "The new is not always welcomed. Our experience showed that the population always benefits from safe water sources, and more specifically their health and well-being are protected. People began to realize that not only the amount of water is important for them, but also the quality, and that it is important to ensure systematic monitoring of water systems to prevent the consequences of low-quality water. I think that a WSP [water safety plan] is a good management approach for all the States."

These actions indicate country's efforts in pursuing the achievement of SDG 3 and SDG 6 and the commitments of the Ostrava Declaration, thereby ensuring equitable and sustainable access to safe drinking-water and sanitation services for all.



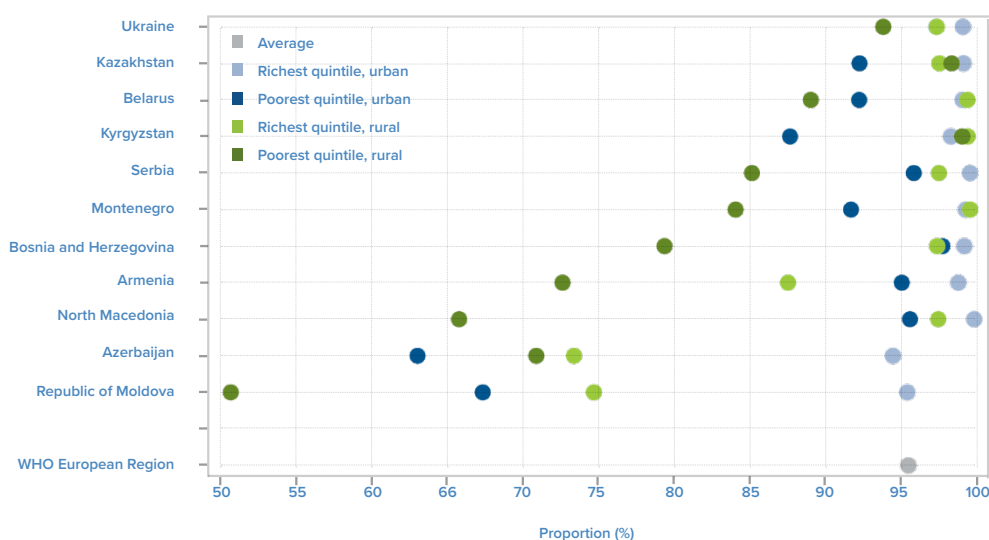
The determination to leave no one behind underlies all SDGs. Inequalities in access to WASH services are frequently related to sociocultural differences, economic factors and the geographical context (29).

Access to basic and safely managed WASH services occur both between Member States within the WHO European Region and also within individual Member States. For example, access to safely managed sanitation services across Member States in the Region ranges from 16% to 99% (11,12). Improved access to drinking-water and sanitation contributes to reducing persisting inequalities between the rich and the poor, the urban and the rural dweller (Fig. 3),

and the general population and marginalized groups. Systematic equity assessments and equitable access action plans can guide country efforts to achieve equitable access to WASH by identifying priority actions and ways of implementing them (30,31).

Ensuring universal and equitable access also implies paying attention to provision of WASH services beyond households, such as in schools, health-care facilities, prisons and workplaces, and addressing special needs of vulnerable groups (Box. 3), including migrants, ethnic minorities and people with disabilities.

Fig. 3. Proportion of urban and rural populations using basic or safely managed sanitation services by wealth quintile



Source: WHO, 2019 (11).

Box 3. Special needs of women and girls

Increasing access to WASH services in households and in institutional settings, such as schools, health-care facilities and workplaces, attends to the needs of women and girls. Not having to share sanitary facilities with other households improves women's security and dignity. Access to safe drinking-water, adequate sanitation and hygiene services, including for menstrual hygiene management, in the public sphere also helps more women and girls to attend schools and work outside of the home and thus contributes to attaining SDG 5 on gender equality.



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Establishing healthy places, settings and resilient communities



Achieving the SDGs is easier if local communities are engaged. Partnerships are essential for building resilient communities. Identifying common priorities and taking action towards ensuring safe WASH facilities, services and health-promoting behaviours and practices in local schools, workplaces and public places can be best organized through close dialogue and partnership with local authorities, businesses, voluntary organizations and other local actors.

In working towards healthy places and settings, schools deserve particular attention. Healthy learning spaces for children are not available everywhere in the WHO European Region. Providing clean school toilets, safe water to drink, water and soap for handwashing, and adequate means for menstrual hygiene management are common challenges across the Region, and inadequate provision hampers good learning, health and well-being (32,33). SDG 4.a calls for building and upgrading education facilities to be child, disability and gender sensitive and providing safe, nonviolent, inclusive and effective learning environments for all (3). Specific WASH indicators support governments

in establishing tangible national targets and action plans, at national and local levels, towards improving WASH in schools and monitoring progress in this area (17,32,34,35). Hand hygiene is the single most effective no-regret action to prevent the transmission of infectious diseases. For building healthy communities, all local stakeholders should commit to provide access to hand hygiene stations and associated supplies in public places (e.g. transport hubs, markets, places of worship) and settings (e.g. schools, health-care facilities, workplaces) to allow people to effectively perform hand hygiene (36).

Hygiene is an essential component of SDG 6.2 and progress to achieve this target is monitored by the availability of functional handwashing stations with soap and water in schools, health-care facilities and households. The COVID-19 pandemic has highlighted the need to shift the priority-setting approach to put universal hand hygiene at the centre of health strategies and bring back a culture of hygiene across all levels of society, as expressed by the global Hand Hygiene for All initiative (37).



Universal health coverage and access to quality essential health-care services (SDG 3.8) are global health priorities (38). These also require due attention to ensuring safe and sustainable WASH services in health-care facilities, which is also enshrined in SDG 6.1 and SDG 6.2.

WASH is a best buy and essential service for achieving safe quality care for all. World Health Assembly resolution 72.7 stresses that safe WASH services in health-care facilities are fundamental in achieving universal health coverage and SDG 3 and SDG 6 (19). The WHO *Global strategy on health, environment and climate change* recognizes that effective and financially sustainable implementation of universal health coverage is based on a resilient and responsive health system (7). It emphasizes the need to address determinants of health and to integrate preventive environmental health actions through policies across sectors. Member States are encouraged to take concrete actions to integrate WASH as a core component into health systems strengthening, universal health coverage programmes and in other health programmes, such as infection prevention and control, antimicrobial resistance, and maternal and child health (7).

Undertaking a comprehensive baseline assessment of the enabling environment (e.g. regulatory framework, human

resources, financing, monitoring and surveillance) and the situation of WASH conditions covering different levels and types of health-care facilities will serve as a basis for evidence-informed prioritization, policy development and improvement interventions (39). Response measures may include:

- 📌 the development of costed and budgeted roadmaps towards improving WASH services;
- 📌 integration of WASH into health programming;
- 📌 adoption of standards for and strengthen surveillance of WASH in health-care facilities;
- 📌 setting of targets and integration of WASH indicators into national monitoring frameworks and/or health facility accreditation systems (Case study 3); and
- 📌 implementing facility-based measures, such as those identified using the WASH FIT, the WHO health facility improvement tool (40).



Case study 3. Serbian experience of translating findings of a national assessment into action towards universal access to WASH in health-care facilities

Serbia was one of the first Member States in the WHO European Region to conduct a comprehensive national assessment on WASH in health-care facilities in response to the World Health Assembly resolution 72/7 and commitments under the Protocol on Water and Health and the Ostrava Declaration. The assessment consisted of (i) an in-depth analysis of the enabling environment (i.e. policy framework, institutional mechanisms, financing, monitoring and surveillance) and (ii) a representative survey on WASH conditions in different types of health-care facility covering all regions of the country using JMP indicators for monitoring progress with SDG 6 (41).

This assessment generated a solid evidence base regarding the provision of basic WASH services in health-care facilities, particularly for rural areas, and identified strengths and gaps at all levels, ranging from policy to on-site implementation. The findings of the assessment led to multiple outcomes, including:

- 📌 setting of national targets on WASH in health-care facilities and integration of WASH in the national regulation (rulebook) on infection prevention and control;
- 📌 developing country-tailored definitions and indicators of an advanced level of service for each dimension of WASH (i.e. water, sanitation, hygiene, waste management and environmental cleaning);
- 📌 introducing advanced service level indicators in the national surveillance framework and WASH monitoring practice that were in alignment with SDG 6 monitoring indicators; and
- 📌 using data obtained through this assessment of national progress in implementing SDG 6 WASH targets for a global progress report on WASH in health-care facilities (to be released in 2020).



Commitments to act

World Health Assembly resolutions 64.24 on drinking-water, sanitation and health in 2011 (42), 72.7 on water, sanitation and hygiene in health-care facilities in 2019 (19), and 73.1 on COVID-19 response in 2020 (43) collectively provide a sound and unambiguous commitment and mandate to pursue and accelerate efforts to provide and sustain safe WASH services for all in all settings as a basis for primary prevention and building resilient and healthy communities. Implementation of the resolutions paves the way for reaching the targets in SDG 3 and SDG 6.

Advancing the WASH agenda in the WHO European Region is a political priority, as expressed by the Ostrava Declaration: “ensuring universal, equitable and sustainable access to safe drinking-water, sanitation and hygiene for all and in all settings, while promoting integrated management of water resources and reuse of safely treated wastewater, where appropriate” (22). Member States committed to develop national portfolios of action to achieve these objectives and to make sustained progress in achieving relevant SDG targets.

The compendium of possible actions to advance the implementation of the Ostrava Declaration included the following priority actions for the WASH domain (22):

- ☰ ratifying or acceding to the Protocol on Water and Health to strengthen national action towards progressively reaching regional and global WASH commitments;
- ☰ adopting the water safety plan and sanitation safety plan approaches in policies and regulations and developing national road maps towards scaling these up in practice;
- ☰ reducing discharge of untreated wastewater into the environment and increasing the efficiency and capacity of existing wastewater treatment facilities;
- ☰ promoting sustainable approaches to water resource management, including the efficient use of water and the consideration of safe reuse of wastewater;
- ☰ promoting universal and equitable access to WASH services through establishing a baseline, setting targets and developing action plans to close the equity gap;
- ☰ promoting sustainable financing to deliver and sustain WASH infrastructures and services;
- ☰ ensuring and sustaining the provision of adequate WASH services in schools and health-care facilities;
- ☰ building climate-resilient WASH services;
- ☰ ensuring that action plans for antimicrobial resistance also address safe water and sanitation in health-care facilities and reduced discharge of untreated wastewater; and
- ☰ reducing the number of deaths and the number of people affected by water-related disasters by strengthening disaster risk governance and increasing disaster preparedness.



Technical resources and tools



How to protect drinking-water: a documentary on developing a water safety plan in practice [video]

https://www.youtube.com/watch?v=z9g4wFmW4FY&list=PLL4_zLP7J_mhqUVIZ1ynz27Ulosn0jB0_&index=2&t=0s



Water, sanitation and hygiene [series of seven videos of voices from the Region on WASH].

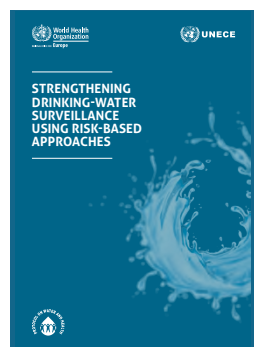
1. What does good water quality mean?
2. Why should access to water and sanitation be equitable?
3. What is needed for water and sanitation in rural communities?
4. How might climate change impact your water?
5. What is safe and efficient water and sanitation management?
6. Why does your school need good sanitation and hygiene?
7. What is good governance for water and sanitation?

https://www.youtube.com/watch?v=MGXaX17-3mM&list=PLL4_zLP7J_mhqUVIZ1ynz27Ulosn0jB0_&index=5&t=0s



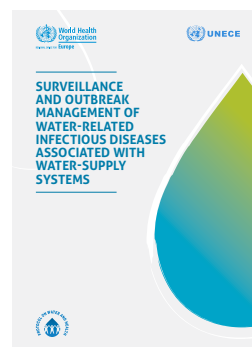
Protocol on Water and Health and the 2030 Agenda: a practical guide for joint implementation

https://www.unece.org/fileadmin/DAM/env/water/publications/WH_16_SDG_Guide/ECE_MP.WH_16_ENG.pdf



Strengthening drinking-water surveillance using risk-based approaches

<https://apps.who.int/iris/bitstream/handle/10665/329396/9789289054430-eng.pdf>



Surveillance and outbreak management of water-related infectious diseases associated with water-supply systems

<https://apps.who.int/iris/bitstream/handle/10665/329403/9789289054454-eng.pdf>



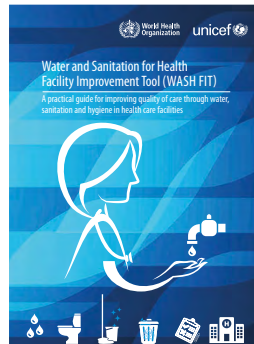
Improving health and learning through better water, sanitation and hygiene in schools: an information package for school staff

<https://apps.who.int/iris/bitstream/handle/10665/329531/9789289054508-eng.pdf?sequence=1&isAllowed=y>



Surveillance of water, sanitation and hygiene in schools: a practical tool

<https://apps.who.int/iris/bitstream/handle/10665/329394/9789289054393-eng.pdf>



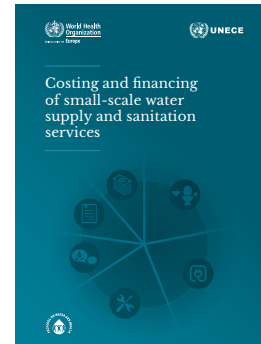
Water and sanitation for health facility improvement tool (WASH FIT): a practical guide for improving quality of care through water, sanitation and hygiene in health care facilities

<https://apps.who.int/iris/bitstream/handle/10665/254910/9789241511698-eng.pdf?sequence=1>



Taking policy action to improve small-scale water supply and sanitation systems: tools and good practices from the pan-European Region

https://www.euro.who.int/__data/assets/pdf_file/0014/320504/Tacking-policy-action-SSW-supply-tools-good-practices-en.pdf



Costing and financing of small-scale water supply and sanitation systems

<https://apps.who.int/iris/bitstream/handle/10665/331843/9789289054973-eng.pdf>



The equitable access score-card supporting policy processes to achieve the human right to water and sanitation

http://www.unece.org/fileadmin/DAM/env/water/publications/PWH_equitable_access/1324456_ECE_MP_WP_8_Web_Interactivef_ENG.pdf



Sanitation safety planning: manual for safe use and disposal of wastewater, greywater and excreta

https://apps.who.int/iris/bitstream/handle/10665/171753/9789241549240_eng.pdf?sequence=1



Water safety plan manual: step-by-step risk management for drinking-water suppliers

https://apps.who.int/iris/bitstream/handle/10665/75141/9789241562638_eng.pdf?sequence=1&isAllowed=y



Water safety plan: a field guide to improving drinking-water safety in small communities

https://www.euro.who.int/__data/assets/pdf_file/0004/243787/Water-safety-plan-Eng.pdf

Key definitions

Access (to WASH) Implies sufficient water to meet domestic needs is reliably available close to home, and sanitation and hygiene facilities close to home that can be easily reached and used when needed (13).

Affordable (WASH services) Payment for services does not present a barrier to access or prevent people meeting other basic human needs (13).

Drinking-water Water that is used, or intended to be available for use, by humans for drinking, cooking, food preparation, personal hygiene or similar purposes (10). **Safe drinking-water** does not represent any significant risk to health over a lifetime consumption, including different sensitivities that may occur between life stages (25).

Equitable (access to WASH) Implies the progressive reduction and elimination of inequalities between population subgroups (13).

Hygiene The conditions and practices that help to maintain health and prevent spread of disease, including handwashing, menstrual hygiene management and food hygiene (13).

Open defecation Excreta of adults or children deposited (directly or after being covered by a layer of earth) in the bush, a field, a beach or other open area; discharged directly into a drainage channel, river, sea or other water body; or wrapped in temporary material and discarded (13).

Sanitation Access to and use of facilities and services for the safe disposal of human urine and faeces. A **safe sanitation system** is a system designed and used to separate human excreta from human contact at all steps of the sanitation service chain from toilet capture and containment through emptying, transport, treatment (in-situ or off-site) and final disposal or end use (26).

Wastewater Liquid waste discharged from homes, commercial premises and similar sources to individual disposal systems or to municipal sewer pipes and which contains mainly human excreta and used water (27).

Water-related disease Any significant adverse effects on human health, such as death, disability, illness or disorders, caused directly or indirectly by the condition, or changes in the quantity or quality, of any waters (23).

Universal (access to WASH) Implies all exposures and settings, including households, schools, health-care facilities, workplaces and public spaces (13).

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